

REMARKS

Applicant respectfully traverses and requests reconsideration.

Applicant again wishes to thank the Examiner for the notice that claims 25-31 are allowed. Applicant also wishes to thank the Examiner for the comments in the Advisory Action.

Claims 1-7, 9-11, 14-17, 23, 24 and 33 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Joffe in view of Krishna. The Advisory Action takes the position that a “program” is a single instruction in applying the Joffe reference. Applicant notes that the amended independent claims point out that the claimed plurality of programs each include a plurality of instructions. As such, the “software tasks” described in Joffe correlate to a claimed “program”. With this correlation, the remaining aspects of the claim are not taught by Joffe as alleged in the office action. For example, as to claim 1, the claim requires an execution pipeline having a depth less than or equal to the plurality of programs. Joffe teaches a different pipeline execution approach wherein the pipeline actually has a depth greater than (7) the plurality of programs (at most 4 active programs). Accordingly, Applicant respectfully submits that the claims are in condition for allowance.

It also appears that the office action misapprehends Applicant’s previous argument with respect to the interleaving of instructions from the plurality of programs. For example, claim 1 also requires that an interleaver interleaves instructions from the plurality of programs and provides instructions to the pipeline for execution such that the number of the plurality of programs that are interleaved is greater than or equal to the depth of the pipeline. As such, Applicant attempted to point out that the cited portion of Joffe did not mention the number of tasks that are used. In any event, as noted above, at best a fewer number of (4) programs or tasks

are interleaved by Joffe using, for argument sake the office action's definition of interleaving. As such, the claims are in condition for allowance for one or more of the above reasons.

The dependent claims add additional novel and non-obvious subject matter.

As to claims 14 and 23, Applicant respectfully reasserts the relevant remarks made above with respect to Joffe. Accordingly, the claims are also in condition for allowance. Also, it appears that the claim language may have been misapprehended. The office action cites to the portion of Krishna that actually refers to a no-op being inserted in the pipeline and teaches an opposite approach to that claimed by Applicant. The claim indicates that the method includes executing instructions amongst a plurality of end programs wherein no no-op is inserted into the pipeline for the purposes of insuring that the instruction is completed before execution of another instruction from another program. Krishna teaches employing a no-op instruction which is opposite to that claimed. As such, the claim is in condition for allowance for this reason as well.

The dependent claims add additional novel and non-obvious subject matter.

As to claim 33, Applicant respectfully notes that this claim also requires, among other things, checking to see if all of said plurality of programs are completed. The office action cites column 2, lines 35-39 as allegedly teaching this subject matter. However, the cited portion does not refer to whether a plurality of identified programs have been completed, but to the contrary, refers to the fact that a resource is not provided to a task until after every other task sharing the resource has finished accessing the resource. The task may still be uncompleted but the resource is allocated as disclosed. As such, Applicant respectfully submits that if the rejection is maintained, that a non-final action be provided with an appropriate cite by column and line number to where Joffe teaches the claimed subject matter. Applicant respectfully submits that the claim is in condition for allowance.

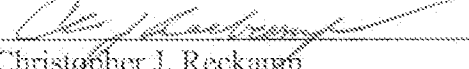
Claims 8 and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Joffe and Krishna in view of Nguyen. Applicant respectfully submits that these claims are allowable at least as depending upon allowable base claims.

Claims 12 and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Joffe and Krishna in view of Narayanaswami. Applicant respectfully submits that these claims are allowable at least as depending upon allowable base claims.

Accordingly, Applicant respectfully submits that the claims are now in condition for allowance and that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below-listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

Dated: 9-28-07

By: 
Christopher J. Reckamp
Reg. No. 34,414

Vedder, Price, Kaufman & Kamholz, P.C.
222 North LaSalle
Chicago, Illinois 60601
312/609-7500
312/609-5005 Facsimile